DATA VALIDATION REPORT

SEATTLE IRON AND METALS
DUST MONITORING - PHASE II

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PROJECT NARRATIVE

Basis for the Data Validation

This report summarizes the results of full validation (EPA Stage 4) performed on PUF cartridge and associated quality control sample data for the Seattle Iron and Metals Dust monitoring project. A complete list of samples is provided in the Sample Index.

Analyses were performed by ALS Life Sciences, Burlington, Ontario. The analytical methods and EcoChem project chemists are listed in the following table:

ANALYSIS	METHOD	PRIMARY REVIEW	SECONDARY REVIEW
Dioxins/Furans	EPA TO-09A	E. Clayton	C. Ransom
PCB Congeners	EPA 1668C		

The data were reviewed using guidance and quality control criteria documented in the analytical methods; *Seattle Iron & Metals Dust Monitoring Plan: Phase II* (June 2020); National *Functional Guidelines for Organic Superfund Methods Data Review* (USEPA 2017); and *National Functional Guidelines for High Resolution Superfund Methods Data Review* (USEPA 2016).

EcoChem's goal in assigning data assessment qualifiers is to assist in proper data interpretation. If values are estimated (J or UJ), data may be used for site evaluation and risk assessment purposes but reasons for data qualification should be taken into consideration when interpreting sample concentrations. Data that have been rejected are flagged with (R). Rejected data should not be used for any purpose. If values have no data qualifier assigned, then the data meet the data quality objectives as stated in the documents and methods referenced above.

Validation criteria are included as Appendix A. The qualified data summary table (QDST) is included as Appendix B. Data Validation Worksheets and project associated communications will be kept on file at EcoChem, Inc. A qualified laboratory electronic data deliverable (EDD) is also submitted.

EcoChem, Inc.

DATA VALIDATION REPORT
Seattle Iron and Metals - Dust Monitoring Phase II
Dioxin/Furan Compounds by EPA TO-09A

This report documents the review of analytical data from the analyses of PUF cartridge samples and the associated laboratory quality control (QC) samples. Samples were analyzed by ALS Life Sciences, Burlington, Ontario. Refer to the **Sample Index** for a complete list of samples.

SDG	NUMBER OF SAMPLES AND MATRIX	VALIDATION LEVEL
L2479138	5 PUF Composites	Stage 4
L2491640	5 PUF Composites	Stage 4
L2504188	5 PUF Composites	Stage 4

DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

EDD TO HARDCOPY VERIFICATION

All sample IDs and results reported in the electronic data deliverable (EDD) were verified (100% verification) by comparing the EDD to the hardcopy laboratory data package. Ten percent (10%) of the laboratory QC results were also verified.

SDG L2479138: The data sampled for Sample Site 5 Composite 1 (JULY) was incorrect in the EDD. The EDD was changed to match the hardcopy report.

The time sampled information in the EDD was incorrect for all samples. The EDD was corrected to match the COC for week 4 samples collected on 7/21/20.

SDGs L2491640, L2504188: The collection dates and times were missing from the EDD for all samples. Dates were added during validation. The values for the week 4 samples were used for the composites.

Sample Index
Seattle Iron and Metals - Dust Monitoring Phase II

Sample ID	Laboratory ID	Dioxins	PCB Congeners
SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	✓	✓
SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	✓	✓
SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	✓	✓
SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	✓	✓
SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	✓	✓
SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	✓	✓
SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	✓	✓
SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	✓	✓
SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	✓	✓
SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	✓	✓
SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	✓	✓
SITE 2 - COMPOSITE 3 (SEPTEMBER)	L2504188-2	✓	✓
SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	✓	✓
SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	✓	✓
SITE 5 - COMPOSITE 3 (SEPTEMBER)	L2504188-5	✓	✓

TECHNICAL DATA VALIDATION

The quality control (QC) requirements that were reviewed are listed in the following table.

1	Sample Receipt, Preservation, and Holding Times	1	Laboratory Control Samples
✓	System Performance and Resolution Checks	1	Matrix Spike/Matrix Spike Duplicates (MS/MSD)
✓	Initial Calibration (ICAL)	1	Field Duplicates
1	Calibration Verification (CCAL)	✓	Reporting Limits and Sample Quantitation
2	Laboratory Blanks	✓	Target Analyte List
1	Field Standard Labeled Compounds	2	Compound Identification
✓	Extraction Standard Labeled Compounds	1	Calculation Verification
✓	Cleanup Standards		

✓Method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.
1 Quality control results are discussed below, but no data were qualified.
2 Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Sample Receipt, Preservation, and Holding Times

The validation guidance documents state that the cooler temperatures should be within an advisory temperature range of ≤6°C. Weekly samples were stored frozen until samples for all 4 individual sampling events for the month were collected. These were then composited into a single sample. A holding time of one year was used to evaluate the sample extraction and analysis.

SDG L2479138: Several sample cooler temperatures were greater than the upper control limit, ranging from 6.5 to 25°C. These outliers did not impact data quality; no data were qualified.

SDG L2491640: Several sample cooler temperatures were greater than the upper control limit, ranging from 8.1 to 25.1°C. These outliers did not impact data quality; no data were qualified.

SDG L2504188: One sample cooler temperature was greater than the upper control limit at 7°C. This outlier did not impact data quality; no data were qualified.

Calibration Verification

With the following exception, all calibration verification (CCAL) criteria were met. The CCAL were analyzed at the beginning of each sequence as required. All compound concentrations fell within the acceptance limits specified in the method. All ion ratios were acceptable. The S/N ratio was greater than 10, as required, for all compounds. All relative retention times for all target compounds met the required criteria.

SDG L2491640: For the CCAL analyzed on 9/13/20 14:59, the recovery for 1,2,3,7,8,9-HxCDF was greater than the upper control limit. This compound was not detected in the associated samples; no data were qualified.

Laboratory Blanks

To assess the impact of any blank contaminant on the reported sample results, an action level is established at five times (5x) the concentration reported in the blank. If a contaminant is reported in an associated field sample and the concentration is less than the action level, the result is qualified as not detected (U-7). No action is taken if the sample result is greater than the action level, or for non-detected results. The laboratory assigned EMPC-flags to values when a peak was detected but did not meet identification criteria. These values cannot be considered as positive identifications, but are "estimated maximum possible concentrations". When these occurred in the method blank the results were considered as false positives. No action levels were established for these analytes.

Method blanks (media blanks and reagent blanks) were analyzed at the appropriate frequency. For detected results, the highest concentrations from the two blanks were used to evaluate field sample data. Several target analytes were detected in the method blanks; however, only results for the following analytes required qualification based on method blank contamination:

SDG L2479138: 1,2,3,7,8-PeCDF

SDG L2504188: OCDF and 1,2,3,7,8,9-HxCDF

Field Standard Labeled Compounds

Five labeled compounds were added to the sample cartridges prior to sampling. The percent recovery (%R) values method specified control limits are 70-130%. These surrogates are used to evaluate the sampling system and are not used for sample quantitation. No action was taken unless three or more of the compounds were outside of the control limits.

SDG L2479138: The %R values for 13C12-1,2,3,4,7,8-HxCDF were less than the lower control limit in all samples. This was the only outlier in each sample; no action was taken.

SDG L2491640: The following outliers were noted. There was only one outlier per sample; therefore, no action was taken.

SAMPLE ID	LABELED COMPOUND	BIAS
SITE 1 - COMPOSITE 2 (AUGUST)	13Cl-1,2,3,6,7,8-HxCDF	Low
SITE 4 - COMPOSITE 2 (AUGUST)	13Cl-2,3,4,7,8-PeCDF	High
SITE 5 - COMPOSITE 2 (AUGUST)	13Cl-1,2,3,6,7,8-HxCDF	Low

Extraction Standard Labeled Compounds

Isotope-stable labeled compounds were added to each field and QC sample. All recoveries were within the method criteria of 40-130% (25-130% for hepta and octa-chlorinated compounds).

Laboratory Control Samples

Laboratory control samples were analyzed at the proper frequency. With the following exception, all recovery values were within the control limits.

SDG L2491640: The recovery for 1,2,3,7,8,9-HxCDD was greater than the upper control limit. This analyte was not detected in the field samples; no qualification was required.

Matrix Spikes/Matrix Spike Duplicates

Matrix spike/matrix spike duplicates (MS/MSD) were not analyzed. These are not required by the method. Accuracy was assessed using labeled compound and LCS recoveries. Precision within an analytical batch could not be evaluated.

Field Duplicates

No field duplicates were collected.

Compound Identification

The laboratory reported EMPC or "estimated maximum possible concentrations" values for one or more of the target analytes in all samples. An EMPC value was reported when a peak was detected but did not meet identification criteria as required by the method; therefore, the result cannot be considered as positive identification for the analyte. The lab flagged these results "R". All EMPC results were qualified as not-detected (U-25) at the reported concentrations.

The laboratory uses DB5 MS column, which provides adequate resolution of the TCDF isomers as indicated by the acceptable peak to valley ratios. There were no positive results for 2,3,7,8-TCDF in the field samples. No second column confirmation was necessary.

Calculation Verification

Several results were verified by recalculation from the raw data. No calculation or transcription errors were found.

OVERALL ASSESSMENT

As determined by this evaluation, the laboratory performed the specified analytical method. With the exceptions noted above, accuracy was acceptable as demonstrated by the labeled compound and laboratory control sample recoveries. Precision within an analytical batch could not be evaluated as no matrix spike/matrix spike duplicates or laboratory control sample duplicates were analyzed.

Detection limits were elevated based on method blank contamination and ion ratio outliers.

All data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
Seattle Iron and Metals - Dust Monitoring Phase II
PCB Congeners by EPA 1668C

This report documents the review of analytical data from the analyses of PUF cartridge samples and the associated laboratory quality control (QC) samples. Samples were analyzed by ALS Life Sciences, Burlington, Ontario. Refer to the Sample Index for a complete list of samples.

SDG	NUMBER OF SAMPLES AND MATRIX	VALIDATION LEVEL
L2479138	5 PUF Composites	Stage 4
L2491640	5 PUF Composites	Stage 4
L2504188	5 PUF Composites	Stage 4

DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

EDD TO HARDCOPY VERIFICATION

Ten percent (10%) of the results in the laboratory EDD were verified by comparison to the laboratory data package. No errors were noted.

SDG L2479138: The time sampled for Samples Site 4 Composite 1 (JULY) and Site 5 Composite 1 (JULY) was incorrect in the EDD. The EDD was changed to match the CoC for the week 4 samples collected on 7/21/20.

SDGs L2491640, L2504188: The collection dates and times were missing from the EDD for all samples. Dates were added during validation. The values for the week 4 samples were used for the composites.

TECHNICAL DATA VALIDATION

This report documents the review of analytical QC requirements as listed in the following table.

1	Sample Receipt, Preservation, and Holding Times	✓	Laboratory Control Samples
✓	Instrument Performance Check	1	Matrix Spike/Matrix Spike Duplicates (MS/MSD)
✓	Initial Calibration (ICAL)	1	Field Duplicates
✓	Continuing Calibration Verification (CCV)	1	Reporting Limits and Sample Quantitation
1	Laboratory Blanks	✓	Target Analyte List
✓	Field Standard Labeled Compounds	2	Compound Identification
2	Extraction Standard Labeled Compounds	2	Compound Quantitation
1	Cleanup Standards	1	Calculation Verification

1 Quality control results are discussed below, but no data were qualified.
2 Quality control outliers that impact the reported data were noted.
 Data qualifiers were issued as discussed below.

Sample Receipt, Preservation, and Holding Times

The validation guidance documents state that the cooler temperatures should be within an advisory temperature range of ≤6°C. Weekly samples were stored frozen until 4 weeks worth of samples were collected. These were then composited into a single sample. A holding time of one year was used to evaluate the sample extraction and analysis.

SDG L2479138: Several sample cooler temperatures were greater than the upper control limit, ranging from 6.5 to 25°C. These outliers did not impact data quality; no data were qualified.

SDG L2491640: Several sample cooler temperatures were greater than the upper control limit, ranging from 8.1 to 25.1°C. These outliers did not impact data quality; no data were qualified.

SDG L2504188: One sample cooler temperature was greater than the upper control limit at 7°C. This outlier did not impact data quality; no data were qualified.

Laboratory Blanks

To assess the impact of any blank contaminant on the reported sample results, an action level is established at five times (5x) the concentration reported in the blank. If a contaminant is reported in an associated field sample and the concentration is less than the action level, the result is qualified as not detected (U-7). No action is taken if the sample result is greater than the action level, or for non-detected results. The laboratory assigned EMPC-flags to values when a peak was detected but did not meet identification criteria. These values cannot be considered as positive identifications, but are "estimated maximum possible concentrations". When these occurred in the method blank the results were considered as false positives. No action levels were established for these analytes.

Method blanks (media blanks and reagent blanks) were analyzed at the appropriate frequency. For detected results, the highest concentrations from the two blanks were used to evaluate field sample data. Although several target analytes were detected in each blank for every batch, all associated detected results were greater than the 5X action levels. No qualification of data was required.

Field Standard Labeled Compounds

Labeled compounds were added to the sample cartridges prior to sampling. All percent recovery values (%R) were within the control limits of 70-130%. T

Extraction Standard Labeled Compounds

The percent recovery (%R) values for labeled compounds were within the method-defined control limits, with the exceptions noted below:

SDG L2491640: For Sample Site 1 – Composite 1 (AUGUST), the %R value for PCB-189L was greater than the upper control limit. Detected results for congeners quantitated using this labeled compound were estimated (J-13H).

Laboratory Control Samples

Laboratory control samples (LCS) were analyzed with each batch. All recoveries were within the control limits of 70%-130%.

Matrix Spikes/Matrix Spike Duplicates

Matrix spike/matrix spike duplicates (MS/MSD) were not analyzed. These are not required by the method.

Field Duplicates

No field duplicates were submitted.

Compound Identification

The laboratory reported EMPC or "estimated maximum possible concentrations" values for one or more of the target analytes in all samples. An EMPC value was reported when a peak was detected but did not meet identification criteria as required by the method; therefore, the result cannot be considered as positive identification for the analyte. The lab flagged these results "R".   All EMPC results were qualified as not-detected (U-25) at the reported concentrations.

SDG L2479138 : The peaks for PCB-12/13 and PCB-15 were misidentified in several samples. In addition, the 13C-PCB-15 peak was misidentified in Sample Site 5 Composite.   The laboratory was contacted and reprocessed the data with the correct peak identifications. Revised data packages and EDDs were submitted.

Compound Quantification

The laboratory reported several sample results with an "E" flag indicating an instrument response that exceeded the highest concentration calibration standard. These "E" flagged results were estimated (J-20).

Calculation Verification

Several results were verified by recalculation from the raw data. No transcription or calculation errors were found.

OVERALL ASSESSMENT

As was determined by this evaluation, the laboratory performed the specified analytical method. With the exceptions noted above, accuracy was acceptable as demonstrated by the labeled compound and LCS recoveries. Precision within the batches could not be assessed.

Detection limits were elevated due to ion ratio outliers. Data were estimated based on an extraction standard recovery outlier and for results that exceeded the calibration range of the instrument.

All data, as qualified, are acceptable for use.

APPENDIX A

DATA QUALIFIER DEFINITIONS
REASON CODES
AND CRITERIA TABLES

DATA VALIDATION QUALIFIER CODES
Based on National Functional Guidelines

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents the approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The following is an EcoChem qualifier that may also be assigned during the data review process:

DNR	Do not report; a more appropriate result is reported from another analysis or dilution.

DATA QUALIFIER REASON CODES

Group	Code	Reason for Qualification
Sample Handling	1	Improper Sample Handling or Sample Preservation (i.e., headspace, cooler temperature, pH, summa canister pressure); Exceeded Holding Times
Instrument Performance	24	Instrument Performance (i.e., tune, resolution, retention time window, endrin breakdown, lock-mass)
	5A	Initial Calibration (RF, %RSD, r^2)
	5B	Calibration Verification (CCV, CCAL; RF, %D, %R) Use bias flags (H,L)[1] where appropriate
	5C	Initial Calibration Verification (ICV %D, %R) Use bias flags (H,L)[1] where appropriate
Blank Contamination	6	Field Blank Contamination (Equipment Rinsate, Trip Blank, etc.)
	7	Lab Blank Contamination (i.e., method blank, instrument blank, etc.) Use low bias flag (L)[1] for negative instrument blanks
Precision and Accuracy	8	Matrix Spike (MS and/or MSD) Recoveries Use bias flags (H,L)[1] where appropriate
	9	Precision (all replicates: LCS/LCSD, MS/MSD, Lab Replicate, Field Replicate)
	10	Laboratory Control Sample Recoveries (a.k.a. Blank Spikes) Use bias flags (H,L)[1] where appropriate
	12	Reference Material Use bias flags (H,L)[1] where appropriate
	13	Surrogate Spike Recoveries (a.k.a. labeled compounds, recovery standards) Use bias flags (H,L)[1] where appropriate
Interferences	16	ICP/ICP-MS Serial Dilution Percent Difference
	17	ICP/ICP-MS Interference Check Standard Recovery Use bias flags (H,L)[1] where appropriate
	19	Internal Standard Performance (i.e., area, retention time, recovery)
	22	Elevated Detection Limit due to Interference (i.e., chemical and/or matrix)
	23	Bias from Matrix Interference (i.e. diphenyl ether, PCB/pesticides)
Identification and Quantitation	2	Chromatographic pattern in sample does not match pattern of calibration standard
	3	2nd column confirmation (RPD or %D)
	4	Tentatively Identified Compound (TIC) (associated with NJ only)
	20	Calibration Range or Linear Range Exceeded
	25	Compound Identification (i.e., ion ratio, retention time, relative abundance, etc.)
Miscellaneous	11	A more appropriate result is reported (multiple reported analyses i.e., dilutions, re-extractions, etc. Associated with "R" and "DNR" only)
	14	Other (See DV report for details)
	26	Method QC information not provided

[1] **H = high bias indicated**

L = low bias indicated

EcoChem, Inc.

Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Sample Handling					
Cooler/Storage Temperature Preservation	Waters/Solids ≤ 6°C & in the dark Tissues <-10°C & in the dark **Preservation Aqueous:** If Cl_2 is present Thiosulfate must be added and if pH > 9 it must be adjusted to 7 - 9	NFG [1] Method [2]	J(pos)/R(ND) if thiosulfate not added if Cl_2 present; J(pos)/UJ(ND) if pH not adjusted J(pos)/UJ(ND) if temp > 20°C	1	**EcoChem PJ, see TM-05**
Holding Time	**If properly stored, 1 year or:** **Extraction (all matrices):** 30 days from collection **Analysis (all matrices):** 45 days from extraction	NFG [1] Method [2]	If not properly stored or HT exceedance: J(pos)/UJ(ND)	1	**EcoChem PJ, see TM-05** Gross exceedance = > 1 year 2011 NFG **Note:** Under CWA, SDWA, and RCRA the HT for H2O is 7 days.
Instrument Performance					
Mass Resolution (Tuning)	PFK (Perfluorokerosene) ≥10,000 resolving power at m/z 304.9824. Exact mass of m/z 380.9760 w/in 5 ppm of theoretical value (380.97410 to 380.97790) . Analyzed prior to ICAL and at the start and end of each 12 hr. shift.	NFG [1] Method [2]	R(pos/ND) all analytes in all samples associated with the tune	24	Notify PM
Windows Defining Mix	Peaks for first and last eluters must be within established retention time windows for each selector group (chlorination level)	NFG [1] Method [2]	If peaks are not completely within windows (clipped): If natives are ok, J(pos)/UJ(ND) homologs (Totals) If natives are affected, R all results for that selector group	24	Notify PM
Column Performance Mix	Both mixes must be analyzed before ICAL and CCAL Valley < 25% (valley = (x/y)*100%) where x = ht. of TCDD (or TCDF) & y = baseline to bottom of valley For all isomers eluting near the 2378-TCDD (TCDF) peak (TCDD only for 8290)	NFG [1] Method [2]	J(pos) if valley > 25%	24	**EcoChem PJ, see TM-05, Rev. 2**; Note: TCDF is evaluated only if second column confirmation is performed
Initial Calibration **Sensitivity**	S/N ratio > 10 for all native and labeled compounds in CS1 std.	NFG [1] Method [2]	If <10, elevate Det. Limit or R(ND)	5A	
Initial Calibration **Selectivity**	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	NFG [1] Method [2]	If 2 or more ion ratios are out for one compound in ICAL, J(pos)	5A	**EcoChem PJ, see TM-05, Rev. 2**

Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Instrument Performance (continued)					
Initial Calibration (Minimum 5 stds.) **Stability**	%RSD < 20% for native compounds %RSD <30% for labeled compounds (%RSD < 35% for labeled compounds under 1613b)	NFG [1] Method [2]	J(pos) natives if %RSD > 20%	5A	
	Absolute RT of $^{13}C_{12}$-1234-TCDD >25 min on DB5 & >15 min on DB-225	NFG [1] Method [2]	Narrate, no action		**EcoChem PJ, see TM-05, Rev. 2**
Continuing Calibration (Prior to each 12 hr. shift) **Sensitivity**	S/N ratio for CS3 standard > 10	NFG [1] Method [2]	If <10, elevate Det. Limit or R(ND)	5B	
Continuing Calibration (Prior to each 12 hr. shift) **Selectivity**	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	NFG [1] Method [2]	For congener with ion ratio outlier, J(pos) natives in all samples associated with CCAL. No action for labeled congener ion ratio outliers.	25	**EcoChem PJ, see TM-05**
Continuing Calibration (Prior to each 12 hr. shift) **Stability**	%D+/-20% for native compounds %D +/-30% for labeled compounds **(Must meet limits in Table 6, Method 1613B)** If %D in the closing CCAL are within 25%/35%, the mean RF from the two CCAL may be used to calculate samples **(Section 8.3.2.4 of 8290)**.	NFG [1] Method [2]	**Labeled compounds:** Narrate, no action. **Native compounds:** 1613: J(pos)/UJ(ND)if %D is outside Table 6 limits J(pos)/R(ND) if %D is +/-75% of Table 6 limits 8290: J(pos)/UJ(ND) if %D = 20% - 75% J(pos)/R(ND) if %D > 75%	5B (H,L)[3]	
	Absolute RT of $^{13}C_{12}$-1234-TCDD and $^{13}C_{12}$-123789-HxCDD should be ± 15 seconds of ICAL RRT for all other compounds must meet criteria listed in Table 2 Method 1316.	NFG [1] Method [2]	Narrate, no action	5B	**EcoChem PJ, see TM-05**
Blank Contamination					
Method Blank (MB)	MB: One per matrix per batch of (of ≤ 20 samples) No detected compounds > RL	NFG [1] Method [2]	U(pos) if result is < 5X action level.	7	**Hierarchy of blank review: #1 - Review MB, qualify as needed #2 - Review FB , qualify as needed**
Field Blank (FB)	FB: frequency as per QAPP No detected compounds > RL		U(pos) if result is < 5X action level.	6	

Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Precision and Accuracy					
MS/MSD (recovery)	**MS/MSD not typically required for HRMS analyses.** If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos) if both %R > UCL - high bias J(pos)/UJ(ND) if both %R < LCL - low bias J(pos)/R(ND) if both %R < 10% - very low bias J(pos)/UJ(ND) if one > UCL & one < LCL, with no bias **PJ if only one %R outlier**	8 (H,L)[3]	No action if only one spike %R is outside criteria. No action if parent concentration is >4x the amount spiked. Qualify parent sample only unless other QC indicates systematic problems.
MS/MSD (RPD)	**MS/MSD not typically required for HRMS analyses.** If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos) in parent sample if RPD > CL	9	Qualify parent sample only.
LCS (or OPR)	One per lab batch (of ≤ 20 samples) Use most current laboratory control limits **or** Limits from Table 6 of 1613B	NFG [(1)] Method [(2)]	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias	10 (H,L)[3]	No action if only one spike %R is outside criteria, when LCSD is analyzed. Qualify all associated samples.
LCS/LCSD (RPD)	**LCSD not typically required for HRMS analyses.** One set per matrix and batch of 20 samples RPD < 35%	Method [(2)] Ecochem standard policy	J(pos) assoc. compound in all samples if RPD > CL	9	Qualify all associated samples.
Lab Duplicate (RPD)	**Lab Dup not typically required for HRMS analyses.** One per lab batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos)/UJ(ND) if RPD > CL	9	
Labeled Compounds (Internal Standards)	Added to all samples %R = 40% - 135% in all samples 8290 %R must meet limits in Table 7 Method 1613B	NFG [(1)] Method [(2)]	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias	13 (H,L)[3]	
Field Duplicates	Solids: RPD <50% OR difference < 2X RL (for results < 5X RL) Aqueous: RPD <35% OR difference < 1X RL (for results < 5X RL)	EcoChem standard policy	Narrate and qualify if required by project	9	**Use professional judgment**

Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Compound ID and Calculation					
Quantitation/ Identification	All ions for each isomer must maximize within ± 2 seconds. S/N ratio >2.5 Ion ratios must meet criteria listed in Table 8 Method 8290, or Table 9 of 1613B; RRTs w/in limits in Table 2 of 1613B	NFG [1] Method [2]	Narrate in report; qualify if necessary NJ(pos) for retention time outliers. U(pos) for ion ratio outliers.	25	**EcoChem PJ, see TM-05**
EMPC (estimated maximum possible concentration)	If quantitation identification criteria are not met, laboratory should report an EMPC value.	NFG [1] Method [2]	If laboratory correctly reported an EMPC value, qualify the native compound U(pos) to indicate that the value is a detection limit and qualify total homolog groups J (pos)	25	**Use professional judgment See TM-18**
Interferences	Interferences from chlorodiphenyl ether compounds	NFG [1] Method [2]	J(pos)/UJ(ND) if present	23	**See TM-16**
	Lock masses must not deviate ± 20% from values in Table 8 of 1613B	Method [2]	J(pos)/UJ(ND) if present	24	**See TM-17**
Second Column Confirmation	All 2,3,7,8-TCDF hits must be confirmed on a DB-225 (or equiv) column. All QC criteria must also be met for the confirmation analysis.	NFG [1] Method [2]	Report the DB-225 value. If not performed use PJ.	3	DNR-11 DB5 result if both results from both columns are reported. **EcoChem PJ, see TM-05**
Calculation Check	Check 10% of field & QC sample results	EcoChem standard policy	Contact laboratory for resolution and/or corrective action	na	Full data validation only.
Electronic Data Deliverable (EDD)					
Verification of EDD to hardcopy data	EcoChem verify @ 10% unless problems noted; then increase level up to 100% for next several packages.		Depending on scope of problem, correct at EcoChem (minor issues) to resubmittal by laboratory (major issues).	na	EcoChem Project Manager and/or Database Administrator will work with lab to provide long-term corrective action.
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	Standard reporting policy	Use "DNR" to flag results that will not be reported.	11	

(pos) - positive (detected) results; (ND) - not detected results

[1] National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins (CDDs) & Chlorinated Dibenzofurans (CDFs) Data Review, September 2011

[2] Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC/HRMS), USEPA SW-846, Method 8290

[2] EPA Method 1613, Rev.B, Tetra-through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGS/HRMS, October 1994

[3] NFG 2013 suggests using "+ / -" to indicate bias; EcoChem has chosen "H" = high bias indicated; "L" = low bias indicated.

PCB Congener Analysis by HRMS
(Based on EPA DV Guidance[1] and Method EPA 1668C)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Sample Handling					
Cooler/Storage Temperature Preservation	Waters/Solids ≤ 6°C & in the dark Tissues <-10°C & in the dark **Preservation Aqueous:** If Cl_2 is present Thiosulfate must be added and if needed adjust pH to 2 - 3 (drinking water requirement)	EPA [1] Method [2]	J(pos)/R(ND) if thiosulfate not added if Cl_2 present and J(pos)/UJ(ND) if pH not adjusted; J(pos)/UJ(ND) if temp > 20°C	1	Note: EPA DV guidance documents use < 4°C, method uses ≤ 6°C. Info in EcoChem TM-05 also generally applies.
Holding Time	If properly stored, 1 year prior to extraction. If extracts properly stored (< -10°C & in dark), 1 year from extraction to analysis.	EPA [1] Method [2]	If not properly stored or HT exceeded: J(pos)/UJ(ND)	1	**May be dictated by QAPP** Info in EcoChem TM-05 also generally applies
Instrument Performance					
Mass Resolution (Tuning)	≥10,000 resolving power at m/z 330.9792 <5 ppm deviation from each m/z listed in **Table 7** of method. Analyzed prior to ICAL and at the beginning and end of each 12 hr. shift	EPA [1] Method [2]	R all analytes in all samples associated with a failed tune	24	PFK (Perfluorokerosene) tuning compound
Column Resolution	Mix of all 209 PCBs run prior to each ICAL/12 hours RT of PCB209 must be > 55 min PCB156 & 157 must coelute w/in 2 sec PCB34 & 23 and PCB187 & 182 must be resolved where ((x/y)*100%) < 40% x = ht of valley and y = ht of shortest peak RRT of all congeners must fall within the range in **Table 2** of the method	EPA [1] Method [2]	If criteria are not met, review sample chromatograms to determine if sample results are negatively impacted. If so, discuss with client for possible reanalyses, or J(pos) all data.	24	Criteria are for SPB-octyl column. If different column used, see Section 6.9.1.2 of method. Appendix A provides info for DB-1 column
Initial Calibration **Sensitivity**	S/N ratio > 10 for all native and labeled congeners in CS1 std.	EPA [1] Method [2]	If <10, elevate Det. Limit or R(ND)	5A	
Initial Calibration **Selectivity**	Ion Abundance ratios within QC limits (**Table 8** of Method 1668C)	EPA [1] Method [2]	If ion ratios are out for a given congener in 2 or more standards in ICAL, J(pos) results for that congener in all samples	5A	Professional judgement. The info in EcoChem TM-05 also generally applies
Initial Calibration (Minimum 5 stds.) **Stability**	%RSD < 20% for congeners listed in **Table 3** of method RRT of all congeners must meet **Table 2** of method	EPA [1] Method [2]	J(pos) natives if %RSD > 20% RRT outliers: narrate, no action	5A	RRT outliers: professional judgement. The info in EcoChem TM-05 also generally applies
Continuing Calibration (Prior to each 12 hr. shift) **Sensitivity**	S/N ratio for CS3 standard > 10	EPA [1] Method [2]	If <10, elevate Det. Limit to lowest calibration or R(ND)	5B	
Continuing Calibration (Prior to each 12 hr. shift) **Selectivity**	Ion Abundance ratios within QC limits (**Table 8** of Method 1668C)	EPA [1] Method [2]	No action if %D acceptable, review sample ion ratios, U(pos) if ion ratio outside limits	5B	Professional judgement. The info in EcoChem TM-05 also generally applies.

PCB Congener Analysis by HRMS
(Based on EPA DV Guidance[1] and Method EPA 1668C)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Continuing Calibration (Prior to each 12 hr. shift) **Stability**	Recoveries must meet VER% limits in **Table 6**, Method 1668C	EPA [1] Method [2]	**Labeled congeners:** Narrate, no action. **Native congeners:** J(pos)/UJ(ND) for low bias J(pos) for high bias	5B (H,L)[3]	
	Absolute RT of all Labeled congeners and Window Defining Congeners must be +/- 15 sec of RT in ICAL RRT of all congeners must be within range in **Table 2** of method	EPA [1] Method [2]	Narrate, no action	5B	Professional judgement. The info in EcoChem TM-05 also generally applies
Blank Contamination					
Method Blank (MB)	MB: One per matrix per batch of (of ≤ 20 samples) No detected congeners	EPA [1] Method [2]	U(pos) if sample result is < 5X blank concentration	7	**Heirarchy of blank review: #1 - Review MB, quaify as needed #2 - Review FB , qualify as needed**
Field Blank (FB)	FB: frequency as per QAPP No detected congeners		U(pos) if sample result is < 5X blank concentration	6	EMPC values in blanks as considered to be non-detects
Precision and Accuracy					
MS/MSD (recovery)	**MS/MSD not typically required for HRMS analyses.** If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos) if both %R > UCL - high bias J(pos)/UJ(ND) if both %R < LCL - low bias J(pos)/R(ND) if both %R < 10% - very low bias J(pos)/UJ(ND) if one > UCL & one < LCL, with no bias **PJ if only one %R outlier**	8 (H,L)[3]	No action if only one spike %R is outside criteria. No action if parent concentration is >4x the amount spiked. Qualify parent sample only unless other QC indicates systematic problems.
MS/MSD (RPD)	**MS/MSD not typically required for HRMS analyses.** If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos) in parent sample if RPD > CL	9	Qualify parent sample only.
LCS (or OPR)	One per lab batch (of ≤ 20 samples) %R must meet limits in **Table 6** Method 1668C	EPA [1] Method [2]	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias	10 (H,L)[3]	No action if only one spike %R is outside criteria, when LCSD is analyzed. Qualify all associated samples.
LCS/LCSD (RPD)	**LCS/LCSD not typically required for HRMS analyses.** If lab analyzes LCS/LCSD then one set per matrix and batch of 20 samples RPD < 35%	EcoChem standard policy	J(pos) assoc. congener in all samples if RPD > CL	9	Qualify all associated samples.
Lab Duplicate (RPD) (if required)	**Lab Dup not typically required for HRMS analyses.** One per lab batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos)/UJ(ND) if RPD > CL	9	Optional element. Qualify parent sample only.

PCB Congener Analysis by HRMS
(Based on EPA DV Guidance[1] and Method EPA 1668C)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Labeled congeners (Internal Standards)	Added to all samples %R must meet limits in **Table 6** Method 1668C	EPA [1] Method [2]	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R <5% - very low bias J(pos)/UJ(ND) if %R between 5-10% for two or more labeled compounds in a substitution group (ie, mono, -di-, trichlorinated)- very low bias	13 (H,L)[3]	See next tab for labled congener associations as per **Table 2** Method 1668
Field Duplicates	Solids: RPD <50% OR difference < 2X RL (for results < 5X RL) Aqueous: RPD <35% OR difference < 1X RL (for results < 5X RL)	EcoChem standard policy	Narrate and qualify if required by project **(EcoChem PJ)**	9	**RPD values may be dictated by QAPP** 35% and 50% are EcoChem defaults
Compound ID and Calculation					
Quantitation/ Identification	All ions for each isomer must maximize within +/- 2 seconds. S/N ratio must >2.5 Ion ratios must meet criteria listed in **Table 8** of 1668C; RRTs w/in limits in **Table 2** of 1668C	EPA [1] Method [2]	Narrate in report; qualify if necessary NJ(pos) for retention time outliers. U(pos) for ion ratio outliers.	25	The info in EcoChem TM-05 also generally applies
EMPC (estimated maximum possible concentration)	If quantitation identification criteria are not met, laboratory should report an EMPC value.	EPA [1] Method [2]	If laboratory correctly reported an EMPC value, qualify the native congener U to indicate that the value is an elevated detection limit and qualify total homolog groups J(+)	25	**Use professional judgment. See TM-18**
Interferences	Lock masses must not deviate +/- 20% from values in **Table 7** of 1668C	Method [2]	J(pos)/UJ(ND) if present	24	**Use professional judgment. See TM-17**
Calibration Range	Results greater than highest calibration standard	EcoChem standard policy	Qualify J (pos)	20	If result from dilution analysis is not reported.
Calculation Check	Check 10% of field & QC sample results	EcoChem standard policy	Contact laboratory for resolution and/or corrective action	na	Full data validation only.
Electronic Data Deliverable (EDD)					
Verification of EDD to hardcopy data	EcoChem verify @ 10% unless problems noted; then increase level up to 100% for next several packages.		Depending on scope of problem, correct at EcoChem (minor issues) to resubmittal by laboratory (major issues).	na	EcoChem Project Manager and/or Database Administrator will work with lab to provide long-term corrective action.
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	Standard reporting policy	Use "DNR" to flag results that will not be reported.	11	

[1] USEPA Region 2 Data Validation, Standard Operating Procedure for EPA Method 1668A, Revision 1, September 2008
   USEPA Region 3 Interim Guidelines for the Validation of Data Generated Using Method 1668 PCB Congener Data, Revision 0, April 2004
   USEPA Region 10 SOP For the Validation of Method 1668 Toxic, Dioxin-like, PCB Data, Revision 1, December 1995
[2] EPA Method 1668, Rev.C, Chlorinated Biphenyl Congeners in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS, April 2010
[3] "H" = high bias indicated; "L" = low bias indicated

(pos): Positive Result(s)
(ND): Non-detects

PCB by 1668C

Labeled Compound

1L	3L	4L	15L	19L	37L	54L	77L	81L	104L	105L	114L	118L	123L	126L	155L	156L/157L	167L	169L	188L	189L	202L	205L	206L	208L	209L
1	2	**4**	5	16	16	40	40	40	82	82	82	82	82	**126**	128	128	128	128	170	170	194	194	**206**	207	**209**
2	**3**	5	6	17	17	41	41	41	83	83	83	83	83		129	129	129	129	171	171	195	195	207	**208**	
		6	7	18	18	42	42	42	84	84	84	84	84		130	130	130	130	172	172	196	196			
		7	8	**19**	20	43	43	43	85	85	85	85	85		131	131	131	131	173	173	197	197			
		8	9	20	21	44	44	44	86	86	86	86	86		132	132	132	132	174	174	198	198			
		9	10	21	22	45	45	45	87	87	87	87	87		133	133	133	133	175	175	199	199			
		10	11	22	23	46	46	46	88	88	88	88	88		134	134	134	134	176	176	200	200			
		11	12	23	24	47	47	47	89	89	89	89	89		135	135	135	135	177	177	201	201			
		12	13	24	25	48	48	48	90	90	90	90	90		136	136	136	136	178	178	**202**	203			
		13	14	25	26	49	49	49	91	91	91	91	91		137	137	137	137	179	179	203	204			
		14	**15**	26	27	50	50	50	92	92	92	92	92		138	138	138	138	180	180	204	**205**			
				27	28	51	51	51	93	93	93	93	93		139	139	139	139	181	181					
				28	29	52	52	52	94	94	94	94	94		140	140	140	140	182	182					
				29	30	53	53	53	95	95	95	95	95		141	141	141	141	183	183					
				30	31	**54**	55	55	96	96	96	96	96		142	142	142	142	184	184					
				31	32	55	56	56	97	97	97	97	97		143	143	143	143	185	185					
				32	33	56	57	57	98	98	98	98	98		144	144	144	144	186	186					
				33	34	57	58	58	99	99	99	99	99		145	145	145	145	187	187					
				34	35	58	59	59	100	100	100	100	100		146	146	146	146	**188**	**189**					
				35	36	59	60	60	101	101	101	101	101		147	147	147	147	190	190					
				36	**37**	60	61	61	102	102	102	102	102		148	148	148	148	191	191					
				38	38	61	62	62	103	103	103	103	103		149	149	149	149	192	192					
				39	39	62	63	63	**104**	**105**	106	106	106		150	150	150	150	193	193					
						63	64	64	106	106	107	107	107		151	151	151	151							
						64	65	65	107	107	108	108	108		152	152	152	152							
						65	66	66	108	108	109	109	109		153	153	153	153							
						66	67	67	109	109	110	110	110		154	154	154	154							
						67	68	68	110	110	111	111	111		**155**	**156**	158	158							
						68	69	69	111	111	112	112	112		158	**157**	159	159							
						69	70	70	112	112	113	113	113		159	158	160	160							
						70	71	71	113	113	**114**	115	115		160	159	161	161							
						71	72	72	115	115	115	116	116		161	160	162	162							
						72	73	73	116	116	116	117	117		162	161	163	163							
						73	74	74	117	117	117	**118**	119		163	162	164	164							
						74	75	75	119	119	119	119	120		164	163	165	165							
						75	76	76	120	120	120	120	121		165	164	166	166							
						76	**77**	78	121	121	121	121	122		166	165	**167**	168							
						78	78	79	122	122	122	122	**123**		168	166	168	**169**							
						79	79	80	124	124	124	124	124			168									
						80	80	**81**	125	125	125	125	125												
									127	127	127	127	127												

APPENDIX B

QUALIFIED DATA SUMMARY TABLE

Qualified Data Summary Table
Seattle Iron and Metals - Dust Monitoring Phase II

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-005	1700	pg	M,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA-TO-09A	1,2,3,4,6,7,8-HpCDF	5.3	pg	M,J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA-TO-09A	OCDF	5.7	pg	M,J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA-TO-09A	1,2,3,7,8-PeCDF	0.82	pg	M,J	U	7
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA-TO-09A	1,2,3,7,8,9-HxCDF	0.56	pg	M,J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA-TO-09A	1,2,3,4,6,7,8-HpCDD	20	pg	M,J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA-TO-09A	1,2,3,7,8-PeCDF	1.1	pg	M,J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA-TO-09A	2,3,4,6,7,8-HxCDF	0.73	pg	M,J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA-TO-09A	1,2,3,7,8,9-HxCDF	0.86	pg	M,J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA-TO-09A	OCDF	5.8	pg	M,J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA-TO-09A	1,2,3,7,8-PeCDF	0.86	pg	M,J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA-TO-09A	1,2,3,4,7,8-HxCDF	0.65	pg	M,J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA-TO-09A	1,2,3,4,6,7,8-HpCDF	4	pg	M,J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-036	24	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-038	22	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-072	71	pg	R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-078	13	pg	M,J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-104	2.7	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-120	6	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-126	29	pg	M,J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-152	5.6	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-150	11	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-148	6.4	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-165	5.1	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-159	6.8	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-162	4.6	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-167	54	pg	R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-169	4.1	pg	M,J,R	U	25

Qualified Data Summary Table
Seattle Iron and Metals - Dust Monitoring Phase II

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-184	2.6	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-182	3.8	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-172	33	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-200	31	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-198/199	200	pg	R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA1668C	PCB-209	12	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-001	229000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-004	1040000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-006	201000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-014	64	pg	R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-019	143000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-018/030	676000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-017	304000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-016	266000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-032	144000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-031	369000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-020/028	387000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-021/033	241000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-022	130000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-052	159000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-044/047/065	135000	pg	E	J	20
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-078	13	pg	M,J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-094	330	pg	R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-121	5.4	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-126	40	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-155	1.6	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-145	7.5	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-165	6.9	pg	J,R	U	25

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-169	6.2	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-184	4.2	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-182	6.7	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-181	4.4	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-191	20	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-189	17	pg	M,J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-197	12	pg	J,R	U	25
L2479138	SITE 2 - COMPOSITE 1 (JULY)	L2479138-2	EPA1668C	PCB-206	160	pg	R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-004	372000	pg	E	J	20
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-018/030	290000	pg	E	J	20
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-017	129000	pg	E	J	20
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-016	115000	pg	E	J	20
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-021/033	108000	pg	E	J	20
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-068	100	pg	R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-078	15	pg	M,J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-120	19	pg	J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-126	46	pg	M,J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-155	3.1	pg	J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-150	18	pg	J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-162	9.2	pg	J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-169	7.8	pg	J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-184	4.5	pg	J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-175	23	pg	J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-181	3.8	pg	J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-189	10	pg	M,J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-197	15	pg	J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-205	5.2	pg	J,R	U	25
L2479138	SITE 3 - COMPOSITE 1 (JULY)	L2479138-3	EPA1668C	PCB-208	59	pg	R	U	25

Qualified Data Summary Table
Seattle Iron and Metals - Dust Monitoring Phase II

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-001	109000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-004	797000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-006	167000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-014	56	pg	R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-019	135000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-018/030	670000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-017	304000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-016	273000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-032	149000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-031	429000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-020/028	454000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-021/033	279000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-022	153000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-052	227000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-049/069	133000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-044/047/065	192000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-040/041/071	107000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-061/070/074/076	135000	pg	E	J	20
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-120	46	pg	J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-126	76	pg	R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-152	30	pg	J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-145	14	pg	J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-148	18	pg	J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-165	8.8	pg	J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-162	29	pg	J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-169	9.3	pg	M,J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-188	13	pg	J,R	U	25
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-197	26	pg	J,R	U	25

Qualified Data Summary Table
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SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2479138	SITE 4 - COMPOSITE 1 (JULY)	L2479138-4	EPA1668C	PCB-207	64	pg	R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-004	1060000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-010	101000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-014	85	pg	R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-012/013	38800	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-019	161000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-018/030	823000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-017	389000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-016	340000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-032	184000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-026/029	120000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-031	524000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-020/028	546000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-021/033	336000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-022	181000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-052	231000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-049/069	134000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-044/047/065	191000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-040/041/071	104000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-061/070/074/076	131000	pg	E	J	20
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-079	190	pg	R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-078	36	pg	M,J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-127	10	pg	M,J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-126	82	pg	R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-148	14	pg	J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-154	140	pg	R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-142	5	pg	J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-159	32	pg	J,R	U	25

Qualified Data Summary Table
Seattle Iron and Metals - Dust Monitoring Phase II

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-169	11	pg	J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-188	14	pg	J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-191	33	pg	J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-189	28	pg	J,R	U	25
L2479138	SITE 5 - COMPOSITE 1 (JULY)	L2479138-5	EPA1668C	PCB-197	25	pg	J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA-TO-09A	1,2,3,4,6,7,8-HpCDD	6.7	pg	M,J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA-TO-09A	1,2,3,7,8-PeCDF	0.86	pg	M,J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA-TO-09A	2,3,4,7,8-PeCDF	0.79	pg	M,J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA-TO-09A	1,2,3,4,6,7,8-HpCDF	1.7	pg	M,J,R	U	25
L2479138	SITE 1 - COMPOSITE 1 (JULY)	L2479138-1	EPA-TO-09A	OCDF	2.6	pg	M,J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-038	17	pg	M,J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-054	110	pg	M,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-055	210	pg	R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-094	54	pg	J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-112	60	pg	M,J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-122	46	pg	J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-114	68	pg	J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-126	27	pg	M,J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-152	4.8	pg	J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-150	9.2	pg	J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-131	51	pg	M,J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-133	33	pg	J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-159	5.7	pg	J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-179	228	pg		J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-176	53.2	pg	J	J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-178	86.9	pg	J	J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-175	14.1	pg	J	J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-187	449	pg	M	J	13H

Qualified Data Summary Table
Seattle Iron and Metals - Dust Monitoring Phase II

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-182	3.7	pg	M,J,R	UJ	13H,25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-183	154	pg		J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-185	25	pg	M,J,R	UJ	13H,25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-174	202	pg	M	J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-177	113	pg		J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-171/173	56.9	pg	J	J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-172	26	pg	J,R	UJ	13H,25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-180/193	343	pg		J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-191	7.1	pg	J,R	UJ	13H,25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-170	124	pg		J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-190	27.7	pg	J	J	13H
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-189	3.4	pg	J,R	UJ	13H,25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-201	39	pg	J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-197	5.4	pg	J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-196	43	pg	M,J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-203	89	pg	M,J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-195	19	pg	J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-205	3.5	pg	M,J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA1668C	PCB-206	41	pg	M,J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-104	13	pg	J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-112	140	pg	M,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-120	16	pg	M,J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-127	9.7	pg	M,J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-126	49	pg	J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-150	28	pg	J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-184	3.9	pg	J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-175	51	pg	J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-181	14	pg	J,R	U	25

Qualified Data Summary Table
Seattle Iron and Metals - Dust Monitoring Phase II

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-197	23	pg	J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA1668C	PCB-207	58	pg	M,J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-068	98	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-079	71	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-112	49	pg	M,J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-120	10	pg	M,J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-126	39	pg	M,J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-152	9.4	pg	M,J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-145	6.9	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-148	5.2	pg	M,J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-133	60	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-165	6.6	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-159	8.2	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-162	6.8	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-178	130	pg	R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-175	19	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-182	6.8	pg	M,J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-191	11	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-189	13	pg	M,J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-202	240	pg	R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-200	50	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA1668C	PCB-209	42	pg	J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-014	49	pg	M,J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-112	170	pg	M,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-111	26	pg	J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-120	34	pg	J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-122	350	pg	M,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-126	120	pg	M,R	U	25

Qualified Data Summary Table
Seattle Iron and Metals - Dust Monitoring Phase II

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-155	5.2	pg	M,J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-159	25	pg	M,J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-188	13	pg	J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-184	5.1	pg	J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-175	52	pg	J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-182	18	pg	M,J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-181	14	pg	J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-197	24	pg	J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-196	270	pg	M,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-205	18	pg	J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-004	1150000	pg	E	J	20
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA1668C	PCB-018/030	1020000	pg	E	J	20
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-014	77	pg	J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-104	32	pg	J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-127	24	pg	J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-126	84	pg	J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-145	24	pg	J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-148	23	pg	J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-169	18	pg	M,J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-188	18	pg	J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-184	8.1	pg	J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-182	21	pg	J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-207	110	pg	M,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA1668C	PCB-004	2090000	pg	E	J	20
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA-TO-09A	1,2,3,4,6,7,8-HpCDF	1.6	pg	M,J,R	U	25
L2491640	SITE 1 - COMPOSITE 2 (AUGUST)	L2491640-1	EPA-TO-09A	OCDF	1.3	pg	J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA-TO-09A	1,2,3,6,7,8-HxCDD	0.91	pg	M,J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA-TO-09A	2,3,4,7,8-PeCDF	1.5	pg	M,J,R	U	25

Qualified Data Summary Table
Seattle Iron and Metals - Dust Monitoring Phase II

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA-TO-09A	1,2,3,4,6,7,8-HpCDF	5.1	pg	M,J,R	U	25
L2491640	SITE 2 - COMPOSITE 2 (AUGUST)	L2491640-2	EPA-TO-09A	OCDF	3.4	pg	J,R	U	25
L2491640	SITE 3 - COMPOSITE 2 (AUGUST)	L2491640-3	EPA-TO-09A	1,2,3,7,8-PeCDF	0.92	pg	M,J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA-TO-09A	1,2,3,6,7,8-HxCDD	0.74	pg	M,J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA-TO-09A	1,2,3,6,7,8-HxCDF	0.45	pg	J,R	U	25
L2491640	SITE 4 - COMPOSITE 2 (AUGUST)	L2491640-4	EPA-TO-09A	1,2,3,4,6,7,8-HpCDF	5.1	pg	M,J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA-TO-09A	1,2,3,6,7,8-HxCDD	0.97	pg	M,J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA-TO-09A	2,3,7,8-TCDF	1.2	pg	M,J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA-TO-09A	2,3,4,7,8-PeCDF	1.6	pg	M,J,R	U	25
L2491640	SITE 5 - COMPOSITE 2 (AUGUST)	L2491640-5	EPA-TO-09A	2,3,4,6,7,8-HxCDF	0.55	pg	M,J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-078	11	pg	M,J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-112	24	pg	M,J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-127	6.7	pg	M,J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-126	13	pg	M,J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-155	2.4	pg	J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-145	2.8	pg	M,J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-162	5.3	pg	J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-169	6	pg	M,J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-184	2.4	pg	J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-181	3.7	pg	M,J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-172	34	pg	M,J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-197	8.9	pg	J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-205	3	pg	J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-209	11	pg	J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-023	93	pg	J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-072	67	pg	M,J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA1668C	PCB-057	61	pg	J,R	U	25
L2504188	SITE 2 - COMPOSITE 3 (SEPTEMBER)	L2504188-2	EPA1668C	PCB-112	54	pg	M,J,R	U	25

Qualified Data Summary Table
Seattle Iron and Metals - Dust Monitoring Phase II

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2504188	SITE 2 - COMPOSITE 3 (SEPTEMBER)	L2504188-2	EPA1668C	PCB-111	3	pg	J,R	U	25
L2504188	SITE 2 - COMPOSITE 3 (SEPTEMBER)	L2504188-2	EPA1668C	PCB-126	55	pg	M,J,R	U	25
L2504188	SITE 2 - COMPOSITE 3 (SEPTEMBER)	L2504188-2	EPA1668C	PCB-169	9.3	pg	M,J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA1668C	PCB-078	13	pg	J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA1668C	PCB-104	6.3	pg	J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA1668C	PCB-126	26	pg	J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA1668C	PCB-155	2.6	pg	J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA1668C	PCB-162	9.4	pg	J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA1668C	PCB-169	6.9	pg	M,J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA1668C	PCB-184	2.9	pg	J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA1668C	PCB-205	7.8	pg	M,J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA1668C	PCB-072	150	pg	M,J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA1668C	PCB-139/140	130	pg	J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA1668C	PCB-104	28	pg	J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA1668C	PCB-111	8	pg	J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA1668C	PCB-126	87	pg	J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA1668C	PCB-155	4.4	pg	J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA1668C	PCB-142	4.4	pg	J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA1668C	PCB-169	18	pg	M,J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA1668C	PCB-182	12	pg	M,J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA1668C	PCB-068	140	pg	J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA1668C	PCB-057	480	pg	J,R	U	25
L2504188	SITE 5 - COMPOSITE 3 (SEPTEMBER)	L2504188-5	EPA1668C	PCB-104	43	pg	J,R	U	25
L2504188	SITE 5 - COMPOSITE 3 (SEPTEMBER)	L2504188-5	EPA1668C	PCB-111	12	pg	J,R	U	25
L2504188	SITE 5 - COMPOSITE 3 (SEPTEMBER)	L2504188-5	EPA1668C	PCB-126	62	pg	J,R	U	25
L2504188	SITE 5 - COMPOSITE 3 (SEPTEMBER)	L2504188-5	EPA1668C	PCB-155	5.9	pg	J,R	U	25
L2504188	SITE 5 - COMPOSITE 3 (SEPTEMBER)	L2504188-5	EPA1668C	PCB-169	17	pg	M,J,R	U	25
L2504188	SITE 5 - COMPOSITE 3 (SEPTEMBER)	L2504188-5	EPA1668C	PCB-004	2120000	pg	E	J	20

Qualified Data Summary Table
Seattle Iron and Metals - Dust Monitoring Phase II

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qualifier	Reason Code
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA-TO-09A	1,2,3,4,6,7,8-HpCDD	13	pg	J,R	U	25
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA-TO-09A	1,2,3,7,8,9-HxCDF	1.31	pg	M,J	U	7
L2504188	SITE 1 - COMPOSITE 3 (SEPTEMBER)	L2504188-1	EPA-TO-09A	OCDF	8.26	pg	M,J,B	U	7
L2504188	SITE 2 - COMPOSITE 3 (SEPTEMBER)	L2504188-2	EPA-TO-09A	1,2,3,4,6,7,8-HpCDD	20	pg	M,J,R	U	25
L2504188	SITE 2 - COMPOSITE 3 (SEPTEMBER)	L2504188-2	EPA-TO-09A	1,2,3,4,6,7,8-HpCDF	7.4	pg	J,R	U	25
L2504188	SITE 2 - COMPOSITE 3 (SEPTEMBER)	L2504188-2	EPA-TO-09A	OCDF	9.5	pg	M,J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA-TO-09A	1,2,3,7,8-PeCDD	1.2	pg	M,J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA-TO-09A	1,2,3,6,7,8-HxCDD	1.3	pg	M,J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA-TO-09A	1,2,3,7,8,9-HxCDD	1.8	pg	M,J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA-TO-09A	1,2,3,4,6,7,8-HpCDF	7.8	pg	M,J,R	U	25
L2504188	SITE 3 - COMPOSITE 3 (SEPTEMBER)	L2504188-3	EPA-TO-09A	OCDF	8.2	pg	M,J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA-TO-09A	1,2,3,4,6,7,8-HpCDD	42	pg	M,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA-TO-09A	1,2,3,4,6,7,8-HpCDF	7.3	pg	M,J,R	U	25
L2504188	SITE 4 - COMPOSITE 3 (SEPTEMBER)	L2504188-4	EPA-TO-09A	OCDF	17	pg	M,J,R	U	25
L2504188	SITE 5 - COMPOSITE 3 (SEPTEMBER)	L2504188-5	EPA-TO-09A	1,2,3,7,8-PeCDD	2.0	pg	M,J,R	U	25